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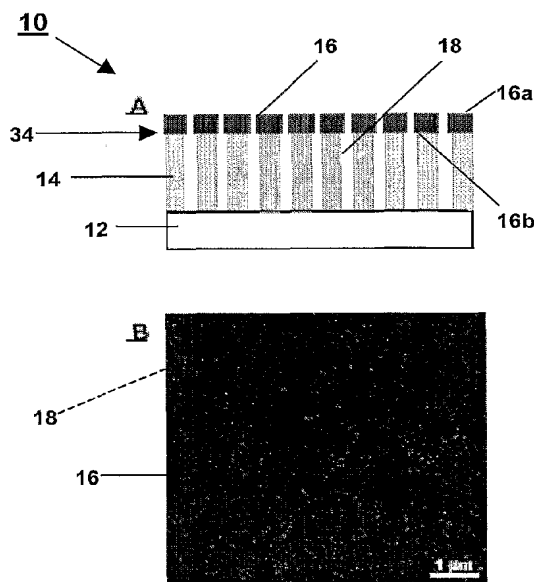
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**(54) Title:** THIN-LAYER POROUS OPTICAL SENSORS FOR GASES AND OTHER FLUIDS



**(S7) Abstract:** A gas sensor uses optical interferents in a porous thin film cell to measure the refractive index of the pore medium. As the medium within the pores changes, spectral variations can be detected. For example, as the pores are filled with a solution, the characteristic peaks exhibit a spectral shift in one direction. Conversely, when tiny amounts of gas are produced, the peaks shift in the opposite direction. This can be used to measure gas evolution, humidity and for applications for other interferometric-based sensing devices.

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